

-64-

**What is claimed is:**

1. An antisense oligonucleotide having 8 to 30 nucleotide units specifically hybridizable with a nucleic acid encoding human PKC- $\delta$  and which is capable of modulating human PKC- $\delta$  expression.
2. The oligonucleotide of claim 1 specifically hybridizable with a translation initiation site or coding region.
3. The oligonucleotide of claim 1 wherein at least one of the intersugar linkages between nucleotide units of the oligonucleotide is a phosphorothioate.
4. The oligonucleotide of claim 1 wherein at least one of the nucleotides comprises a modification on the 2' position of the sugar.
5. The oligonucleotide of claim 4 wherein the modification is a 2'-O-methoxyethyl modification.
6. The oligonucleotide of claim 1 comprising SEQ ID NO: 4, 5, 7, 9, 11, 13, 14, 15 or 16.
7. A composition comprising the oligonucleotide of claim 1 or claim 6 and a pharmaceutically acceptable carrier or diluent.
8. A composition comprising the oligonucleotide of claims 6 and a pharmaceutically acceptable carrier.
9. A method of inhibiting the expression of human PKC- $\delta$  comprising contacting tissues or cells which express human PKC- $\delta$  with an effective dose of the oligonucleotide of claim 1 whereby expression of human PKC- $\delta$  is inhibited.
10. The method of claim 9 wherein said expression of human PKC- $\delta$  is abnormal expression.
11. A method of inhibiting hyperproliferation of cells comprising contacting hyperproliferating cells with an effective dose of the oligonucleotide of claim 1, whereby hyperproliferation of cells is inhibited.
12. A method of treating or preventing an abnormal proliferative condition comprising contacting a patient

-65-

- suspected of having an abnormal proliferative condition, or cells, tissues or a bodily fluid of said patient, with an effective dose of the oligonucleotide of claim 1, whereby the abnormal proliferative condition is treated or
- 5 prevented.
13. The method of claim 12 wherein the condition is a hyperproliferative disorder.
14. The method of claim 13 wherein the hyperproliferative disorder is cancer or psoriasis.
- 10 15. The method of claim 14 wherein the cancer is leukemia.
16. A method of modulating the expression of human TNF- $\alpha$  in cells or tissue comprising contacting said cells or tissue with the oligonucleotide of claim 1.
17. The method of claim 16 wherein said tissue is adipose
- 15 tissue.
18. A method of reducing an inflammatory response of human cells comprising contacting said human cells with the composition of claim 1.
19. A method of treating an animal having a disease or
- 20 condition associated with TNF- $\alpha$  comprising administering to said animal a therapeutically or prophylactically effective amount of an oligonucleotide of claim 1.
20. The method of claim 19 wherein the disease or condition is associated with overexpression of TNF- $\alpha$ .
- 25 21. The method of claim 20 wherein said disease or condition is an inflammatory or autoimmune disease or condition.
22. The method of claim 21 wherein said inflammatory or autoimmune disease or condition is diabetes, inflammatory
- 30 bowel disease, multiple sclerosis, pancreatitis, rheumatoid arthritis, hepatitis, atopic dermatitis or allograft rejection.
23. The method of claim 20 wherein said disease or condition is an infectious disease.

-66-

24. The method of claim 23 wherein said infectious disease is hepatitis.

25. A method of reducing the blood glucose level in a human comprising administering to said animal a  
5 therapeutically or prophylactically effective amount of an oligonucleotide of claim 1.